CLAIMS

1. A method of generating a plurality of images for display of a 3D scene from different viewpoints, comprising:

generating a model of the scene using a homogenous coordinate system which uses first, second and third orthogonal axes and a homogeneity value;

obtaining a first display image from a first viewpoint by transforming vertex positions from the 3D scene into vertex positions in a frustum viewing region using a projection matrix, the projection matrix having terms derived from the position of the viewpoint relative to the frustum viewing region; and

obtaining one or more further display images from one or more further viewpoints aligned along the first axis with the first viewpoint and displaced from the first viewpoint by a multiple of a displacement value, by updating the first axis value of the first display image using the displacement value and the homogeneity value.

2. A method as claimed in claim 1, wherein texture and lighting conditions are applied when creating the first image.

3. A method as claimed in claim 2, wherein the homogeneity value is inversely proportional to a depth value measured along the third orthogonal axis, and is used for interpolation of texture values.

4. A method as claimed in claim 1, wherein the first image and the one or more further images are combined to form an interleaved image for supply to an autostereoscopic display device.

5. A method as claimed in claim 1, wherein the one or more further images are obtained by a graphics processing device without further use of the 3D scene data.

6. Apparatus for generating a plurality of images of a 3D scene from different viewpoints, comprising:

a memory device storing a model of the scene using a homogenous coordinate system which uses first, second and third orthogonal axes and a homogeneity value;

a graphics processor for transforming vertex positions from the 3D scene into vertex positions in a frustum viewing region to define a first image in the viewing region, the graphics processor deriving a projection matrix in dependence on the position of the viewpoint relative to the frustum viewing region, the projection matrix being used to translate image coordinates from the 3D scene into the viewing region;

wherein the graphics processor further comprises means for generating one or more further images from one or more further viewpoints aligned along the first axis with the first viewpoint and displaced from the first viewpoint by a multiple of a displacement value, by updating the first axis value of the first image in the viewing region using the displacement value and the homogeneity value.

7. Apparatus as claimed in claim 6, wherein the graphics processor comprises a graphics acceleration board.

8. An autostereoscopic display device comprising a display panel and an apparatus as claimed in claim 6, for generating multiple images used to drive the display panel as an autostereoscopic display.